UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,494	01/16/2004	Michael J. Sullivan	B03-84	7679

7590 07/12/2005

Troy R. Lester
Acushnet Company
PO Box 965
Fairhaven, MA 02719-0965

EXAMINER	
HUNTER, ALVIN A	

ART UNIT	PAPER NUMBER
3711	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Talk

Office Action Summary	Application No.	Applicant(s)	
	10/759,494	SULLIVAN, MICHAEL J.	
	Examiner	Art Unit	
	Alvin A. Hunter	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-11,13-15 and 17-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-11,13-15 and 17-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17 and 18 both depend from claim 16 which has been cancelled; therefore, claims 17 and 18 are rejected because it is unclear as to what claim there are depending from. For examination purposes, claim 17 and 18 will be treated as being dependent from claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4-11, 13, 14, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5820488) in view of Nakanishi et al. (USPN 3714132) and Wypych (Handbook of Fillers).

Regarding claim 1, Sullivan et al. discloses a golf ball having a cover and a subassembly wherein the subassembly consists of a barrier layer encasing a core wherein the barrier layer has a water vapor transmission rate of less than about 0.2

grams*mm/m^2*day and a thickness of up to .02 inches (20 mils) wherein the vapor layer comprises a polyvinylidene chloride (See Summary of the Invention and Column 5). Sullivan et al. notes that the cover may be of that disclosed in US Patent 5120791, which has a Shore D hardness of 51 to 64 (See Table 4 and 5). Sullivan et al. also notes that other materials may be also used for the water vapor layer (See Summary of the Invention). Nakanishi et al. discloses a liquid polysulfide having reoccurring RSS units (See Columns 1 and 2). The polysulfide is recognized as being used as a sealant wherein sealants are used for water permeability resistance. One having ordinary skill in the art would have found it obvious to substitute the polyvinylidene chloride for the liquid polysulfide because it also reduces the water permeability. Wypych discloses that aluminum flakes have water and oxygen barrio properties. One having ordinary skill in the art would have found it obvious to incorporate aluminum flakes into Sullivan et al. and Nakanishi et al. in order to reduce water permeability.

Regarding claim 2, Nakanishi et al. inherently discloses the composition forming a tortuous path against water vapor encroachment.

Regarding claims 4-6, Sullivan et al. discloses the above but does not disclose a liquid polysulfide. Nakanishi et al. discloses a liquid polyalkylene polysulfide in which protects from moisture and is capable of being cured in atmosphere (see Abstract and Columns 1 and 2). It is also submitted that the polysulfide has a elongation to break ratio of about 400 to 500% being that applicant admit such on page 6 lines 15 through 20. The polysulfide is cured with agents such as peroxides of alkali metals, alkaline earth metals, as metals such as zinc peroxide, cadmium peroxide, barium peroxide,

magnesium peroxide, sodium peroxide, calcium peroxide, and manganese dioxide (See Column 2, lines 31 through 44). The composition also contains sulfur (See Column 2, lines 7 through 23). One having ordinary skill in the art would have found it obvious to incorporate a liquid polysulfide into the invention of Sullivan et al. in order to protect against moisture.

Regarding claim 7, Nakanishi et al. discloses the composition being andryous (See Column 4, lines 6 through 19).

Regarding claims 8 and 18, claim is directed to a product by process, therefore, it is submitted that so long as the final product is achieved the method on producing is not critical.

Regarding claim 9, Sullivan et al. discloses the composition effecting wetting during formation of the barrier layer.

Regarding claim 10, Nakanishi et al. discloses the polysulfide, or curable material, having a viscosity of 10 to 2000 poises, equivalent to 1000 to 200000 cP, and a molecular weight of about 1000 to 8000 (See Column 2, lines 24 through 30).

Regarding claim 11, Nakanishi et al. discloses that the two part composition being that it requires the presence of a curing agent (See Column 2, lines 31 through 44). One having ordinary skill in the art would have come to the conclusion that the composition is millable, extrudable, melt-flowable, castable or injection moldable being the fact that the polysulfide is in liquid for before curing and after curing the polysulfide forms a solid material.

Regarding claims 14 and 17, Applicant submits that polysulfide has a specific gravity of about 1.2 to 1 .3 (See Page 6, line 15).

Regarding claim 19, Sullivan et al. discloses a golf ball having a cover and a subassembly wherein the subassembly consists of a barrier layer encasing a core wherein the barrier layer has a water vapor transmission rate of less than about 0.2 grams*mm/m^2*day and a thickness of up to .02 inches (20 mils) wherein the vapor layer comprises a polyvinylidene chloride (See Summary of the Invention and Column 5). Sullivan et al. also notes that other materials may be also used for the water vapor layer (See Summary of the Invention). Nakanishi et al. discloses a liquid polysulfide having reoccurring RSS units (See Columns 1 and 2). The polysulfide is recognized as being used as a sealant wherein sealants are used for water permeability resistance. Applicant has already admitted that polysulfide has a water vapor transmission rate of less than 0.45. One having ordinary skill in the art would have found it obvious to substitute the polyvinylidene chloride for the liquid polysulfide because it also reduces the water permeability. Wypych discloses that aluminum flakes have water and oxygen barrio properties. One having ordinary skill in the art would have found it obvious to incorporate aluminum flakes into Sullivan et al. and Nakanishi et al. in order to reduce water permeability.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5820488) in view of Nakanishi et al. (USPN 3714132) and Wypych (Handbook of Fillers) and Wu (USPN 5334673).

Regarding claim 15, Sullivan et al. discloses a golf ball having a cover and a subassembly wherein the subassembly consists of a barrier layer encasing a core wherein the barrier layer has a water vapor transmission rate of less than about 0.2 grams*mm/m^2*day and a thickness of up to .02 inches (20 mils) wherein the vapor layer comprises a polyvinylidene chloride (See Summary of the Invention and Column 5). Sullivan et al. also notes that other materials may be also used for the water vapor layer (See Summary of the Invention). Nakanishi et al. discloses a liquid polysulfide having reoccurring RSS units (See Columns 1 and 2). The polysulfide is recognized as being used as a sealant wherein sealants are used for water permeability resistance. Applicant has already admitted that polysulfide has a water vapor transmission rate of less than 0.45. One having ordinary skill in the art would have found it obvious to substitute the polyvinylidene chloride for the liquid polysulfide because it also reduces the water permeability. Wypych discloses that aluminum flakes have water and oxygen barrio properties. One having ordinary skill in the art would have found it obvious to incorporate aluminum flakes into Sullivan et al. and Nakanishi et al. in order to reduce water permeability.Sullivan et al. does not disclose the cover made of urethane. Wu discloses a golf ball cover made of urethane. The urethane cover is disclosesd as being advantageous because it provides the durability of an ionomer cover with the click and feel of a balata cover (See Column 1, lines 6 through 46). One having ordinary skill in the art would have found it obvious to have a urethane cover as taught by Wu in order to improve the click and feel of the golf ball.

Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is (571) 272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich, can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAH
Alvin A. Hunter, Jr.

GREGORY VIDOVICH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700